INSTRUCTIONS

-J05544 REV. 2013-12-06

STREET PERFORMANCE BIG BORE STAGE IV KIT - 103 CUBIC INCHES

GENERAL

Kit Number

92500011

Models

For model fitment information, see the P&A Retail Catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Additional Parts Required

This kit is intended for vehicles that are 103 CI displacement with a stock 3.875 inch bore. If the cylinders are damaged or worn, replace the cylinder assemblies (Part No. 16547-99A, 2 required).

This kit also requires the separate purchase of the Cam Drive Retention Kit (25566-06) and Cam Service Kit (17045-99D) which are available from a Harley-Davidson dealer.

Separate purchase of Cam Spacer Kit (25928-06) is recommended. This kit contains five different spacers to achieve proper sprocket alignment.

See appropriate sections in service manual for the special tools required to install this kit.

Proper installation of this kit also requires the use of Digital Technician™ at a Harley-Davidson dealer.

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

NOTE

This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents

See Figure 1 to Figure 3, and Table 1 to Table 3.

NOTES

Installation of this kit by an authorized Harley-Davidson dealer will not impact your limited vehicle warranty.

The Product Information Label contained in this kit is a requirement of the California Air Resource Board (CARB) emission regulation for all 2010 - 2012 Touring models. Place the label on the right side of the frame directly beneath the VIN sticker. This label is not required outside the state of California.

This conversion kit is intended for High Performance applications only. This engine related performance part is legal for sale or use in California on pollution controlled motor vehicles.

Engine related performance parts are intended for the experienced rider only.

REMOVAL

Prepare for Service

1. Position motorcycle on a suitable lift.

NOTE

If vehicle is equipped with Harley-Davidson Smart Security System, see Owner's Manual for instructions to disarm the system.

2. Remove seat according to the instructions in the owner's manual.

⚠WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

3. Remove fuel tank according to the instructions in the service manual.
4. Remove main fuse. Refer to owner's manual for your motorcycle.

Remove Engine Components

1. Remove existing air cleaner assembly. Refer to AIR CLEANER REMOVAL in service manual.
2. Remove existing exhaust system. Refer to EXHAUST SYSTEM REMOVAL in service manual.
3. Disassemble engine top end and camplate assembly. Refer to appropriate ENGINE sections in service manual.
4. Remove existing clutch diaphragm spring. Refer to CLUTCH REMOVAL in service manual.

INSTALLATION

Install Engine and Clutch Components

1. See Figure 3. Inspect camshaft needle bearings (7) and replace if necessary.
2. See Figure 1 through Figure 3. Assemble cams to camplate, performance cylinder heads and engine top end

using parts from kit. Refer to appropriate ENGINE sections in service manual.

3. Assemble throttle body from kit using original equipment injectors, fuel line, and fuel rail. Refer to instructions in the supplied throttle body kit.
4. Install throttle body assembly to engine using intake flanges and seals supplied in the throttle body kit. Refer to instructions from the supplied throttle body kit.
5. Install clutch diaphragm spring from kit. Refer to CLUTCH INSTALLATION in service manual.
6. Install exhaust system. Refer to EXHAUST SYSTEM INSTALLATION in service manual.
7. Install air cleaner assembly. Refer to AIR CLEANER INSTALLATION in service manual.

Final Assembly

1. Install main fuse. Refer to owner's manual for your motorcycle.
2. Install fuel tank according to the instructions in the service manual.
3. Install seat according to the instructions in the owner's manual.

⚠WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

NOTICE

You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)

NOTICE

Installation of this kit requires a calibration update using Digital Technician. Failure to download calibration update before starting motorcycle will result in ACR failure. (00567b)

4. Start and run engine. Repeat several times to verify proper operation.

Operation

Refer to BREAK-IN RIDING RULES in the Owner's Manual for instructions to break-in the motorcycle.

SERVICE PARTS

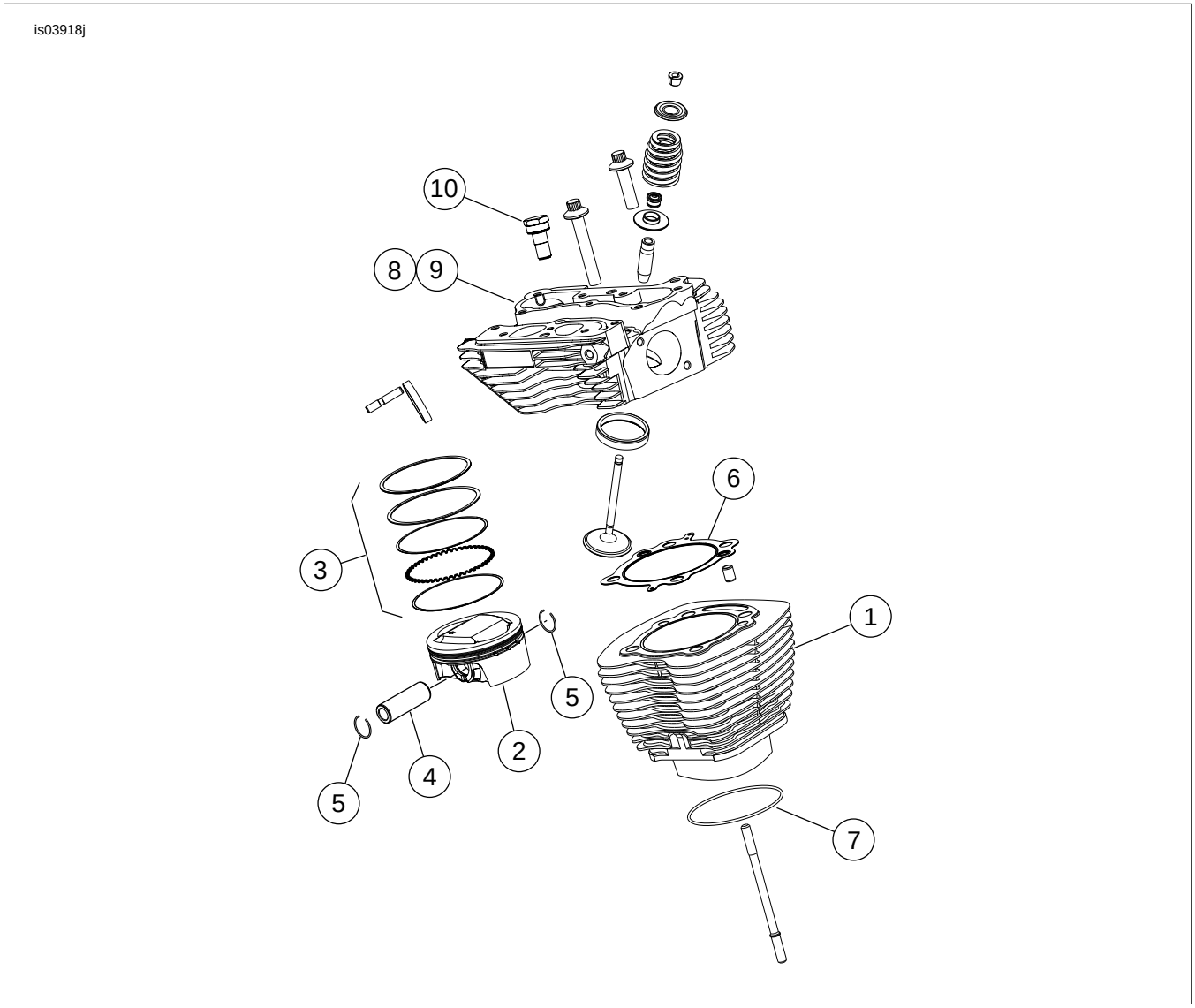

Figure 1. Service Parts: Screamin' Eagle TC 103 (1690 cc) Stage 4 Kit

Table 1. Service Parts Table: Screamin' Eagle TC 103 (1690 cc) Stage 4 Kit

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	3.875 cylinder assembly (black) (2)	Sold Separately	7	O-ring, cylinder base	11256
2	Piston (2)	Not Sold Separately	8	Cylinder head assembly, front (black)	16500014A
3	Piston ring set (2)	22457-10	9	Cylinder head assembly, rear (black)	16500015A
4	Piston pin (2)	22455-03	10	Automatic compression release (ACR) plug	16648-08A
5	Piston pin circlip (4)	22097-99	Notes: Piston Kit (22144-08B) includes items 2 through 5. For cylinder head assembly (8, 9) components, refer to instruction sheet J05340.		
6	Gasket, cylinder head (2)	16787-99A			

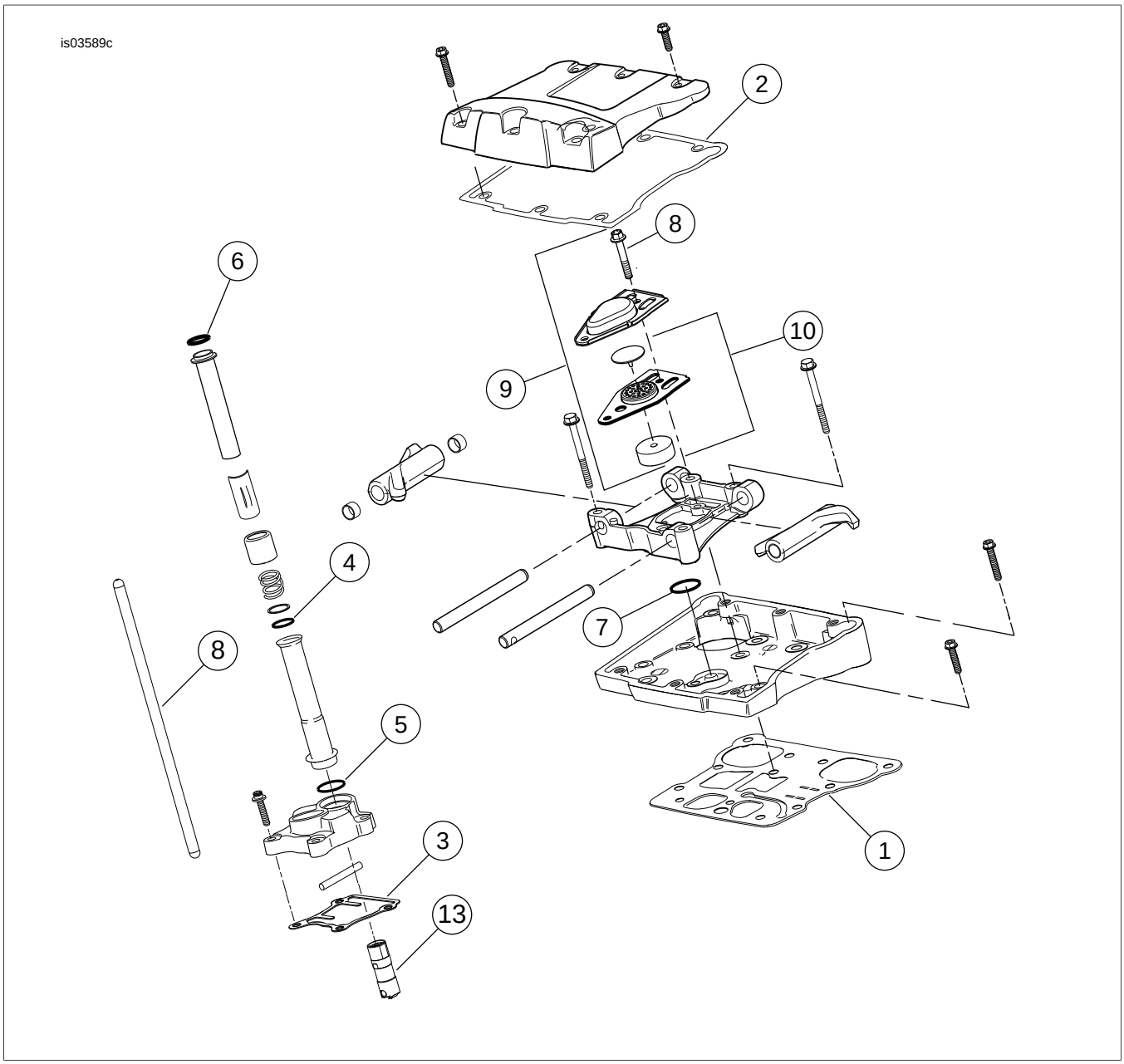

Figure 2. Service Parts: Screamin' Eagle TC 103 (1690 cc) Stage 4 Kit

Table 2. Service Parts: Screamin' Eagle TC 103 cubic inch (1690 cc) Stage 4 Kit

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	Gasket, rocker cover base (2)	16719-99A	9	Breather assembly (2)	17025-03A
2	Gasket, rocker cover top (2)	17386-99A	10	Baffle assembly (2)	26500002
3	Gasket, tappet cover (2)	18635-99B	11	Seal, EFI intake (2) (Not Shown)	29995-86B
4	O-ring, middle push rod cover (4)	11132A	12	Seal, map sensor (2) (Not Shown)	11291
5	O-ring, lower push rod cover (4)	11145A	13	Perfect fit pushrods kit	18400-03
6	O-ring, upper push rod cover (4)	11293	Notes: Breather assembly 17025-03A includes 8 through 10. Items 1 through 11 are included in Upper End Overhaul Kit (17052-99C) and items 6 and 7, Figure 1.		
7	O-ring, rocker arm support (2)	11270			
8	Breather bolt (4)	4400			

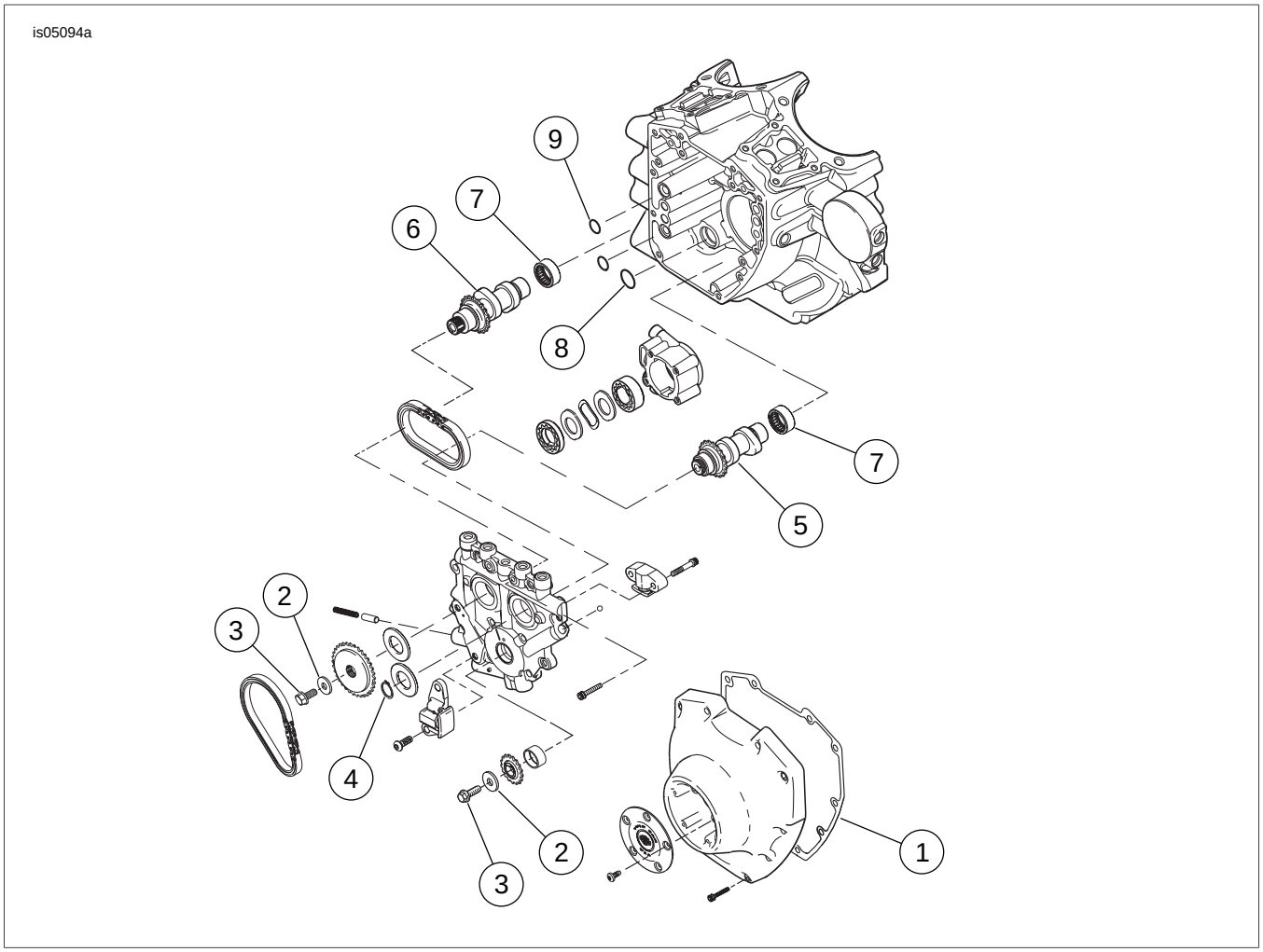

Figure 3. Service Parts: Screamin' Eagle Pro 103 (1690 cc) Stage 4 Kit

Table 3. Service Parts: Screamin' Eagle TC 103 (1690 cc) Stage 4 Kit

Item	Description (Quantity)	Part Number
1	Gasket, cam cover	25244-99A
2	Washer	Not Sold Separately
3	Capscrew, flanged	Not Sold Separately
4	Retaining ring	11461
5	Camshaft, front, SE-259E	Not Sold Separately
6	Camshaft, rear, SE-259E	Not Sold Separately
7	Bearing, needle (2) (must be purchased separately, if needed)	9215
8	O-ring, oil pump to cam plate	11293
9	O-ring, cam plate to crankcase (2)	11301
10	58 mm ETC throttle body kit (not shown)	27713-08
11	Clutch diaphragm spring (not shown)	37951-98
Notes: Cam Drive Retention Kit (25566-06) includes 2 and 3. Items 1, 4, 8 and 9 are included in Cam Service Gasket Kit (17045-99D). Items 5 and 6 available in Cam Kit (25482-10).		